

WHAT IS CLAIMED IS:

1. A magnetic device, comprising:

a magnetic core; and

a springable winding, positioned about at least a portion of  
said magnetic core, having a terminus biased against said magnetic  
core.

2. The magnetic device as recited in Claim 1 wherein said  
terminus is configured to be interposed between said magnetic core  
and a printed circuit board.

3. The magnetic device as recited in Claim 1 wherein said  
springable winding comprises a material having a spring constant  
ranging from about 750 to about 2000 grams/inch.

4. The magnetic device as recited in Claim 1 wherein said  
magnetic core comprises an integrally formed pedestal.

5. The magnetic device as recited in Claim 1 wherein said  
2 magnetic core comprises a ferromagnetic material having a  
3 composition selected from the group consisting of:

4 cobalt-iron,  
5 manganese-zinc,  
6 nickel-iron, and  
7 amorphous nickel-phosphide.

6. The magnetic device as recited in Claim 1 wherein said  
2 springable winding comprises a substantially-planar wire having a  
3 dielectric insulation about said substantially-planar wire.

7. The magnetic device as recited in Claim 1 wherein said  
2 magnetic core and said springable winding are substantially free of  
3 an encapsulant.

8. The magnetic device as recited in Claim 1 wherein said  
2 magnetic device is selected from the group consisting of:

3 an inductor,  
4 a coupled inductor, and  
5 a transformer.

9. The magnetic device as recited in Claim 1 wherein said  
2 magnetic core comprises first and second core halves.

10. The magnetic device as recited in Claim 1 wherein at  
2 least a portion of said magnetic core has an aspect ratio of at  
3 least 1.6:1.

11. A method of manufacturing a magnetic device, comprising:

providing a magnetic core;

positioning a springable winding having a terminus about at least a portion of said magnetic core; and

biasing said terminus against said magnetic core.

12. The method as recited in Claim 11 further comprising forming said springable winding such that said terminus is interposed between said magnetic core and a printed circuit board.

13. The method as recited in Claim 12 wherein forming includes bending said springable winding about a mandrel.

14. The method as recited in Claim 11 wherein positioning includes positioning a springable winding comprising a material having a spring constant ranging from about 750 to about 2000 grams/inch.

15. The method as recited in Claim 11 wherein providing includes providing a magnetic core having an integrally-formed pedestal.

16. The method as recited in Claim 11 wherein providing  
includes providing a magnetic core composed of a ferromagnetic  
material selected from the group consisting of:

cobalt-iron,  
manganese-zinc,  
nickel-iron, and  
amorphous nickel-phosphide.

17. The method as recited in Claim 11 wherein positioning  
includes positioning a springable winding formed from a  
substantially planar wire having a dielectric insulation.

18. The method as recited in Claim 11 wherein providing and  
positioning include providing a magnetic core and positioning a  
springable winding wherein said magnetic core and said springable  
winding are substantially free of an encapsulant.

19. The method as recited in Claim 11 wherein said  
positioning includes positioning a second springable winding about  
said magnetic core.

20. The method as recited in Claim 11 wherein providing  
2 includes providing wherein at least a portion of said magnetic core  
3 has an aspect ratio of at least 1.6:1.